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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,276	05/12/2006	Wolfgang Schnell	SCHNELL-5 (PCT)	1737
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COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			EXAMINER YUN, JURIE	
			ART UNIT 2882	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,276	Applicant(s) SCHNELL, WOLFGANG	
	Examiner JURIE YUN	Art Unit 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-9, 11-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-9, 11-32 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 10/29/10 has been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "segment marking" as claimed in claim 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 34 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 34 recites, in part, "a defect marking system corresponding with the radiation source." This limitation is not understood. The disclosure on page 4 states:

A line sensor 5 with image processor is disposed on the support frame 3, below the running side of the conveyor belt 1, which sensor corresponds with the radiation source 4 that lies opposite. In this manner, the rays can be bundled, in optimal manner, in terms of lines.

On one of the two side parts of the support frame 3, a defect marking system 13 is furthermore disposed, specifically in the region between the carrying side 17 and the running side 18 of the conveyor belt 1 as shown in FIG. 1. Furthermore, the defect marking system is coupled with a control device 14. The defect marking system can place a marking (e.g. a paint spot) on the belt if an irregularity or serious damage is detected, making it possible to find the location on the belt again, quickly and easily. In addition, the radiation source 4 corresponds with the defect marking system 13.

The disclosure teaches the radiation source corresponds with the line sensor with image processor. The disclosure teaches the radiation source also corresponds with the defect marking system. It is well known to those of ordinary skill in the art that a

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radiation source corresponds with a sensor or detector. However, it is not well known to those of ordinary skill in the art how a radiation source would correspond with a defect marking system. How is this possible? A radiation source emits radiation which is ultimately detected by the line sensor with image processor to produce image data or an image. How does the defect marking system use or correspond with the radiation emitted by the radiation source? 35 U.S.C. 112, first paragraph, states that the specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention. Applicant's disclosure does not appear to contain a written description describing in such full, clear, concise and exact terms as to enable any person skilled in the art to make the invention claimed in claim 34.

The disclosure as seen above in part states that the defect marking system can place a marking (e.g. a paint spot) on the belt if an irregularity or serious damage is detected. How is "an irregularity or serious damage" detected by the defect marking system? There is no teaching in the disclosure for how this is done. Claims 2-9 and 11-32 are rejected due to their dependency on claim 34.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: means to detect “a result” of the irradiation test performed when the radiation source emits rays toward the belt surface. It is assumed it is the line sensor with image processor that carries out this function, although, as written, it appears to be the defect marking system. However, the defect marking system doesn't appear to detect the rays emitted by the radiation source since it is not in the path of the emitted rays.

7. Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the relationship between the defect marking system and the other components of the assembly, such as the radiation source, the line sensor with image processor, the segment marking, the start marking, etc. Claim 34 recites a conveyor belt, a radiation source, a process computer, and a defect marking system. But how are these related? What is the structural element which provides "a result" which the process computer evaluates? How does the defect marking system correspond with the radiation source?

8. Claims 2-9 and 11-32 are rejected due to their dependency on claim 34.

Response to Arguments

9. Applicant's arguments filed 10/29/10 have been fully considered but they are not persuasive. Regarding the objection to the drawings stating that the "segment marking" as claimed in claim 14 must be shown, applicant argues:

Original FIG. 1 as well as the previously added and supplemental drawing (FIG. 2) show all the relevant structural details of the claims. The start marking is shown by reference numeral 6 in FIG. 1 as well as in FIG. 2. Since, according to reference numeral list, concerning reference numeral 6, the "start marking" can also be the address of the "segment marking" claim 14 is especially well explained by FIG. 2. In FIG. 2, segment 19 with delimitations 20 is therefore clearly shown in the drawings. Thus, it is respectfully submitted that the drawings do show every feature of the invention specified in the claims.

The examiner respectfully disagrees. The reference numeral list does not denote "6" for "start marking" AND for "segment marking". Furthermore, the disclosure on page 7 states that the address of the segment marking and the start marking 6 are separate marking systems.

REFERENCE SYMBOL LIST

[0033]	1 conveyor belt		
[0034]	2 non-driven drum (reversing or deflection drum)		
[0035]	3 support stand (support frame)		
[0036]	4 radiation source		
[0037]	5 line sensor with image processor		
[0038]	6 start marking (trigger marking)	{0043}	11 transponder reader
[0039]	7 read head	{0044}	12 control device for radiation source
[0040]	8 transponder	{0045}	13 defect marking system
[0041]	9 antenna for transponder	{0046}	14 control device for defect marking system
[0042]	10 encoder	{0047}	15 process computer (controller)
		{0048}	16 monitor

Thus, this argument is not persuasive.

Regarding the rejection of claim 34 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, applicant amended the

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specification to state that "the radiation source (4) corresponds with a defect marking system (13)." Applicant also argues:

On Page 4 of the Office Action, the Patent Examiner has stated that "Further, it is not understood how an 'irregularity or serious damage' is detected. There is no teaching in the disclosure for how this is done."

In response to this objection, it is respectfully pointed out that one skilled in the art would understand how this damage could be detected. This includes reviewing the present disclosure and the disclosures of these prior art documents as set forth in the present Specification:

DE 101 40 920 A1
WO 03/059789 A2, and
DE 100 17 473 A1.

Withdrawal of this objection is respectfully requested.

The examiner respectfully disagrees. It is respectfully requested that in the response, applicant please explain how this is done rather than stating that one skilled in the art would understand how this damage could be detected. Indeed, a radiation source could irradiate radiation towards and through the conveyor belt. The attenuation signals could be received by a detector and then the image could be compared to an image of the conveyor belt at the location representing no damage, for example. But it is not known what role the defect marking system plays in this. This is not described anywhere in the disclosure other than to just state that it corresponds with the radiation source. Thus, this argument is not persuasive.

Applicants also argue:

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On Page 4 of the Office Action, the Patent Examiner objected to claim 14 because it recites "segment marking" and "start marking." It is not understood how or why these are used. Does this have anything to do with the defect marking system?

In response to this objection, it is respectfully pointed out that pages 5, 6, and 7 of the present Specification discuss these elements of claim 14. One skilled in the art would clearly understand these structures.

Withdrawal of this ground of rejection is respectfully requested.

The examiner respectfully disagrees. Page 5, lines 5-6 state: "Two start markings 6 comprise, i.e. delimit a finite segment of the conveyor belt 1." This is understood. With respect to the segment marking, page 6, lines 1-3 state: "Every finite segment is provided with a distinct address, so that segment marking is formed. The distinctness is produced by means of segment numbering (e.g. 1, 2, 3 etc.)." This is not clearly understood and is not shown in the drawings. Furthermore, how do these (start marking and segment marking) relate to the defect marking system? Thus, this argument is not persuasive.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JURIE YUN whose telephone number is (571)272-2497. The examiner can normally be reached on Monday-Friday 8:30-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jurie Yun/
Primary Examiner, Art Unit 2882

December 20, 2010